

WHAT IS CLAIMED IS:

1. A fertilizer based on elemental sulfur, comprising elemental sulfur, at least one binder suitable to break down in the soil, and at least one glassy-matrix preparation that contains at least one trace element.
- 5 2. The fertilizer according to claim 1, wherein said glassy-matrix preparation is in powder form.
3. The fertilizer according to claim 2, wherein said powder has an average diameter of less than 100 μm .
4. The fertilizer according to claim 1, comprising elemental sulfur in a
10 quantity from 65 to 95% by weight, at least one binder in a quantity from 3 to 25% by weight, and at least one glassy-matrix preparation, containing at least one trace element, in a quantity from 3 to 30% by weight.
5. The fertilizer according to claim 1, further comprising at least one wetting agent.
- 15 6. The fertilizer according to claim 5, wherein said wetting agent is present in a quantity smaller than, or equal to, 5% by weight.
7. The fertilizer according to claim 1, wherein said at least one trace element is selected from the group consisting of Fe, B, Zn, Cu, Co, Mn, Mo.
8. The fertilizer according to claim 1, wherein said binder is selected
20 from the group consisting of clays, bentonite, kaolins or the like or mixtures thereof.
9. The fertilizer according to claim 5, wherein said wetting agent is of the type of cationic or anionic surfactants.
10. The fertilizer according to claim 1, wherein said glassy matrix
25 comprises at least one component selected from the group consisting of P_2O_5 , SiO_2 , Al_2O_3 , TiO_2 , ZrO_2 .
11. The fertilizer according to claim 1, wherein said glassy matrix comprises at least one modifier selected from the group consisting of K_2O , Na_2O , Li_2O , CaO , MgO , BaO .
- 30 12. A method for obtaining a fertilizer based on elemental sulfur,

comprising the steps of mixing elemental sulfur, at least one binder suitable to break down in the soil and selected from the group consisting of clays, bentonite, kaolins or the like or mixtures thereof, and at least one glassy-matrix preparation that comprises at least one trace element selected from the group consisting of Fe, B, Zn, Cu, Co, Mn, Mo, a thermal treatment of the resulting mixture until the sulfur melts, dripping and cooling of the resulting fluid into particles.

13. The method according to claim 12, further comprising addition of at least one wetting agent, such as cationic or anionic surfactants.

14. The method according to claim 12, wherein said elemental sulfur is mixed in a quantity from 65 to 95% by weight, said binder is mixed in a quantity from 3 to 25% by weight, said glassy-matrix preparation is mixed in a quantity from 3 to 30% by weight, and said wetting agent is mixed in a quantity from 0 to 5% by weight.

15. The method according to claim 12, wherein said thermal treatment is carried out at a temperature from 120 to 280 °C.

16. A method for obtaining a fertilizer based on elemental sulfur, comprising extrusion of a wet mixture that comprises elemental sulfur, at least one binder that is suitable to break down in the soil and selected from the group consisting of clays, bentonite, kaolins or the like or mixtures thereof, at least one glassy-matrix preparation comprising at least one trace element selected from the group consisting of Fe, B, Zn, Cu, Co, Mn, Mo, and at least one fluid vehicle, in order to obtain particles, and drying said particles.

17. A method for obtaining a fertilizer based on elemental sulfur, comprising granulation of a moist mixture that comprises elemental sulfur, at least one binder that is suitable to break down in the soil and is selected from the group consisting of clays, bentonite, kaolins or the like or mixtures thereof, at least one glassy-matrix preparation which comprises at least one trace element selected from the group consisting of Fe, B, Zn, Cu, Co, Mn,

Mo, and at least one fluid vehicle in order to obtain particles, and drying said particles.

18. The method according to claim 16, further comprising adding to said mixture at least one wetting agent such as cationic or anionic surfactants.